

REMARKS

The Office Action dated February 20, 2008 has been received and carefully noted. The above amendments to the specification and claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1-6, 8, and 11-17 have been amended to more particularly point out and distinctly claim the subject matter of the invention. Claim 7 has been cancelled without prejudice or disclaimer. New claims 18-36 have been added. No new matter has been added. Therefore, claims 1-6 and 8-36 are currently pending in the application and are respectfully submitted for consideration.

The Office Action objected to the disclosure because of minor informalities. Specifically, the Office Action alleged that paragraphs 0007-0008 contain missing or illegible text. Furthermore, the Office Action alleged that paragraph 0022 should read “subscriber within a signaling,” rather than “subscriber within an signaling.”

Applicants have amended the specification to replace paragraphs 0007 and 0008, so that the text is legible, and to amend paragraph 0022 to include “subscriber within a signaling,” rather than “subscriber within an signaling.” Applicants respectfully submit that said amendments moot the objection, and respectfully request that the objection be withdrawn.

The Office Action rejected claims 1-17 under 35 U.S.C. §102(b) as allegedly anticipated by “3rd Generation Partnership Project” (“3GPP”). The Office Action alleged

that 3GPP discloses or suggests every claim feature recited in claims 1-17. Claim 7 has been cancelled, and Applicants respectfully submit that the rejection, with respect to claim 7, is mooted. Regarding the remaining claims, Applicants respectfully traverse these rejections for at least the following reasons.

Claim 1, upon which claims 2-6 are dependent, recites a method of deactivating a service account associated with an application server of a registered subscriber within a signaling network supporting internet protocol based services. The method includes monitoring a status of a service account, and forwarding a request for de-registration from the application server via a direct interface to a registration server, which maintains a registration status of the subscriber, upon determining that disruption or termination of service is required. The method further includes changing the registration status of the subscriber so as to de-register the subscriber at the registration server in response to the de-registration request.

Claim 8, upon which claims 9-10 are dependent, recites a system for deactivating a service account of a registered subscriber within a signaling network supporting internet protocol based services. The system includes a registration server configured to maintain a registration status of the subscriber. The system further includes an application server, to which the service account is associated, configured to monitor a status of the service account and to forward via a direct interface a request for de-registration to the registration server, upon determining that disruption or termination of service is required.

The registration server is configured to change the registration status of the subscriber so as to de-register the subscriber in response to the de-registration request.

Claim 11, upon which claims 12-14 and 18-19 are dependent, recites a method of deactivating a service account associated with an application server of a registered subscriber within a signaling network supporting internet protocol based services. The method includes monitoring a status of the service account, and forwarding a request for barring from the application server via a direct interface to a registration server, which maintains a registration status of the subscriber, upon determining that disruption or termination of service is required. The method further includes changing a barring indication of the subscriber so as to bar the subscriber at the registration server by changing the barring indication in response to the barring request.

Claim 15 recites a system for deactivating a service account of a registered subscriber within a signaling network supporting internet protocol based services. The system includes a registration server configured to maintain a registration status of the subscriber. The system further includes an application server, to which the service account is associated, configured to monitor a status of the service account and to forward via a direct interface a request for barring to the registration server, upon determining that disruption or termination of service is required. The registration server is configured to change a barring indication of the subscriber to bar the subscriber in response to the barring request.

Claim 16 recites a system for deactivating a service account associated with an application server of a registered subscriber within a signaling network supporting internet protocol based services. The system includes monitoring means for monitoring a status of the service account, and forwarding means for forwarding a request for de-registration from the application server via a direct interface to a registration server, which maintains a registration status of the subscriber, upon determining that disruption or termination of service is required. The system further includes changing means for changing the registration status of the subscriber so as to deregister the subscriber at the registration server in response to de-registration request.

Claim 17 recites a system for deactivating a service account associated with an application server of a registered subscriber within a signaling network supporting internet protocol based services. The system includes monitoring means for monitoring a status of the service account, and forwarding means for forwarding a request for barring from the application server via a direct interface to a registration server, which maintains a registration status of the subscriber, upon determining that disruption or termination of service is required. The system further includes changing means for changing a barring indication of the subscriber so as to bar the subscriber at the registration server by changing the barring indication in response to the barring request.

Claim 20, upon which claims 21-24 are dependent, recites a method of deactivating a service account associated with an application server of a registered subscriber within a signaling network supporting internet protocol based services. The

method includes monitoring a status of a service account, and forwarding a request for de-registration from the application server via a direct interface to a registration server upon determining that disruption or termination of service is required. The registration server maintains a registration status of the subscriber. The registration server changes the registration status of the subscriber so as to de-register the subscriber at the registration server in response to the de-registration request.

Claim 25, upon which claim 26 is dependent, recites a method of deactivating a service account associated with an application server of a registered subscriber within a signaling network supporting internet protocol based services. The method includes receiving from the application server via a direct interface a request for de-registration at a registration server, which maintains a registration status of the subscriber. The method further includes changing the registration status of the subscriber so as to de-register the subscriber at the registration server in response to the de-registration request.

Claim 27, upon which claims 28-29 are dependent, recites a method of deactivating a service account associated with an application server of a registered subscriber within a signaling network supporting internet protocol based services. The method includes monitoring a status of the service account, and forwarding a request for barring from the application server via a direct interface to a registration server upon determining that disruption or termination of service is required. The registration server maintains a registration status of the subscriber. The registration server changes a barring

indication of the subscriber so as to bar the subscriber at the registration server by changing the barring indication in response to the barring request.

Claim 30, upon which claim 31 is dependent, recites a method of deactivating a service account associated with an application server of a registered subscriber within a signaling network supporting internet protocol based services. The method includes receiving from the application server via a direct interface a request for barring to a registration server, which maintains a registration status of the subscriber. The method further includes changing a barring indication of the subscriber so as to bar the subscriber at the registration server by changing the barring indication in response to the barring request.

Claim 32, upon which claim 33 is dependent, recites a registration server for deactivating a service account of a registered subscriber. The registration server includes a storage configured to maintain a registration status of the subscriber. The registration server further includes an updating unit configured to change the registration status of the subscriber so as to de-register the subscriber in response to a de-registration request forwarded from an application server via a direct interface to the registration server.

Claim 34 recites a registration server for deactivating a service account of a registered subscriber. The registration server includes means for maintaining a registration status of the subscriber. The registration server further includes means for changing the registration status of the subscriber so as to de-register the subscriber in

response to a de-registration request forwarded from an application server via a direct interface to the registration server.

Claim 35 recites an application server for deactivating a service account of a registered subscriber. The application server includes a forwarding unit configured to forward a request for de-registration from the application server via a direct interface to a registration server, upon determining that disruption or termination of service is required.

Claim 36 recites an application server for deactivating a service account of a registered subscriber. The application server includes means for monitoring a status of the service account. The application server further includes means for forwarding a request for de-registration from the application server via a direct interface to a registration server, upon determining that disruption or termination of service is required.

Thus, according to embodiments of the invention, because barring or de-registration can be done via the direct interface between the application server and the registration server, there is no need to introduce procedures to the interface between the application server and a call state control functionality of an IP-based network.

As will be discussed below, 3GPP fails to disclose or suggest all of the elements of the claims, and therefore fails to provide the advantages and features discussed above.

3GPP generally discloses a stage-2 service description for a Internet Protocol (IP) Multimedia Core Network Subsystem (IMS), including the elements necessary to support IP Multimedia (IM) services in UMTS. ITU-T Recommendation I.130 describes a three-stage method for characterization of telecommunication services, and ITU-T

Recommendation Q.65 defines stage 2 of the method. 3GPP identifies the mechanisms to enable support for IP multimedia applications. (see 3GPP at “Scope”).

Applicants respectfully submit that 3GPP fails to disclose, teach, or suggest, all of the elements of the present claims. For example, 3GPP fails to disclose, teach, or suggest, at least, “forwarding a request for de-registration from said application server via a direct interface,” as recited in independent claim 1, and similarly recited in independent claims 8, 20, 32, and 34-36; “forwarding a request for barring from said application server via a direct interface to a registration server,” as recited in independent claim 11, and similarly recited in independent claims 16, 17, and 27; “receiving from said application server via a direct interface a request for de-registration at a registration server,” as recited in independent claim 25; and “receiving from said application server via a direct interface a request for barring to a registration server,” as recited in independent claim 30.

3GPP discloses a network-initiated IM core network (CN) subsystem terminal application de-registration based on a registration timeout. A timer value is provided at initial registration and is refreshed by subsequent re-registrations. Once the registration timers in a Proxy-Call Session Control Function (P-CSCF), and a Serving-Call Session Control Function (S-CSCF) expire, the P-CSCF updates its internal databases to remove the public user identify from being registered, and, based on the filter criteria, the S-CSCF sends de-registration information to the service control platform, and performs appropriate service control procedures. Subsequently, the S-CSCF sends out a Cx-Put

message, and the public user identity is no longer considered registered in the S-CSCF. The home subscriber server (HSS) either clears or keeps the S-CSCF name for the public user identity according to the request. In either case, the state of the public user identity is stored as unregistered in the HSS. The HSS then sends a Cx-Put Resp message to the S-CSCF to acknowledge the sending of the Cx-Put message. (see 3GPP at page 41). Furthermore, 3GPP also discloses that another trusted party may also initiate the de-registration by issuing a third party SIP registration with timer set to 0 via the S-CSCF. (see 3GPP at page 44).

Thus, 3GPP discloses that the application server forwards a de-registration request via the S-CSCF to the registration server, where the registration status of the user is changed. This is different from embodiments of the present invention, as claimed in the independent claims, where the application server forwards a de-registration request to the registration server via a direct interface and not via a S-CSCF.

Therefore, for at least the reasons discussed above, 3GPP fails to disclose, teach, or suggest, all of the elements of independent claims 1, 8, 11, 15-17, 20, 25, 27, 30, 32, and 34-36. For the reasons stated above, Applicants respectfully request that this rejection be withdrawn.

Claims 2-6 depend upon independent claim 1. Claims 9-10 depend upon independent claim 8. Claims 12-14 and 18-19 depend upon independent claim 11. Claims 21-24 depend upon independent claim 20. Claim 26 depends upon independent claim 25. Claims 28-29 depend upon independent claim 27. Claim 31 depends upon

independent claim 30. Claim 33 depends upon independent claim 32. Thus, Applicants respectfully submit that claims 2-6, 9-10, 12-14, 18-19, 21-24, 26, 28-29, 31, and 33 should be allowed for at least their dependence upon independent claims 1, 8, 11, 20, 25, 27, 30, and 32, respectively, and for the specific elements recited therein.

For at least the reasons discussed above, Applicants respectfully submit that the cited prior art references fails to disclose or suggest all of the elements of the claimed invention. These distinctions are more than sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of claims 1-6 and 8-36 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosures: Additional Claim Fee Transmittal
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